

Policy on Sound and Marine Mammals: An International Workshop

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Regulating Antarctic activities: Policy on sound & marine mammals

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Research



ANTARCTIC TREATY CONSULTATIVE PARTIES

Argentina

Australia

Belgium

Brazil

Chile

China

Ecuador

Finland

France

Germany

India

Italy

Japan

Korea

New Zealand

Netherlands

Norway

Peru

Poland

Russia

S.Africa

Spain

Sweden

Ukraine

UK

USA

Uruguay

ANTARCTIC TREATY SYSTEM

- ANTARCTIC TREATY (1959)
- Convention for the Conservation of Antarctic Seals (1972)
- Convention for the Conservation of Antarctic Marine Living Resources (1980)
- Protocol for the Protection of the Antarctic
 Environment (1991)

ANTARCTIC TREATY

- Continent for peace and science
- Freedom for scientific investigations
- Freedom to inspect
- No military activities or dumping of nuclear waste
- All territorial claims "frozen"
- Applies south of 60°S but not High Seas

ANTARCTIC TREATY

- All agreements by consensus
- SCAR for independent science advice
- Recommendations need to be turned into national law to be active
- Lack of priority in many legislatures for Antarctic matters

CONVENTION FOR THE CONSERVATION OF ANTARCTIC SEALS

- Applies to seas south of 60°S
- Allows sustainable harvesting
- Focussed on killing & capturing only
- No procedures to deal with incidental damage

CONVENTION FOR THE CONSERVATION OF MARINE LIVING RESOURCES

- Applies south of the Polar Front
- Management is on an ecosystem basis
- Covers all living organisms except where IWC (whales) & CCAS (seals) has precedence
- Commission advised by Scientific Committee
- Inspection and catch quotas as controls
- Monitoring to assess impacts

PROTOCOL FOR THE PROTECTION OF THE ANTARCTIC ENVIRONMENT

- Comprehensive protection for environment
- All activities subject to EIA
- International inspection for compliance
- Regular monitoring to detect change
- Advisory committee established

SCIENTIFIC COMMITTEE ON ANTARCTIC RESEARCH

- Established in 1956
- Part of ICSU family
- International and independent
- Objectives to provide co-ordination of science programmes and facilitate planning and collaboration
- Given special privileges as Observer at Treaty
 Meetings

PRINCIPAL SOURCES OF MARINE NOISE

- Small number of ships with propulsion & depth sonar noise
- Infrequent & limited air gun seismics and multi-beam investigations
- Acoustic releases etc on marine equipment
- High levels of noise from breaking ice

No military exercises or oil company seismic investigations

MAKING POLICY

- Environmental discussions take place at the Committee for Environmental Protection
- Papers can come from Parties, Observers or Experts
- Any Recommendations or other instruments are agreed at the plenary of the ATCM
- Potential for overlapping jurisdictions can cause confusion
- In many cases concensus on guidelines is more easily achieved than legal changes



- Environmental Impact Assessment
- Permitting

But there may be other national legislation applying to ALL marine mammals

EIA

- Undertaken in advance of activity
- Three levels preliminary, initial and comprehensive
- Test for level is
 less than "minor and/or transitory"
 "minor and/or transitory"
 more than "minor and/or transitory"

PERMITTING FOR ACTIVITIES

- Approach depends on national legislation
- •More than one agency or government department may be involved
- •Judgement of EIA may be by permitting authority or by advisory independent body
- •Permit may be for individuals, specific expeditions, or organisations
- •Permits from one country may or may not be acceptable for activities by nationals of another

PERMITTING EXAMPLES

- AUSTRALIA –EIA required, judged by Australian Antarctic Division, all permits issued for individuals and groups by AAD
 - •GERMANY EIA required, judged by Federal Environment Agency (Umweltbundesamt), permits from Umwelt. For nationals but other state permits acceptable
 - •USA EIA required, judged by NSF or EPA, permits only for waste disposal
 - •UK EIA required, judged by FCO for IEE and above, some permits issued by BAS and some by FCO, permits only for UK nationals

ANTHROPOGENIC NOISE IN THE SOUTHERN OCEAN

- Concerns raised by Germany and ASOC at ATCM about impacts of scientific activities on marine ecosystem
- Permits for acoustic operations from Polarstern withheld from German nationals
- SCAR holds two workshops to assess problem and make recommendations
- Germany organises meeting in Berlin
- Spain raises concerns at ATCM

ANTHROPOGENIC NOISE IN THE SOUTHERN OCEAN

- Germany applies precautionary principle and no longer permits activities previously allowed (eg Hydrosweep)
- Lack of Antarctic data, extrapolation from other science data and a confounding with the impacts of military equipment complicate progress
- SCAR first workshop and German Berlin meeting propose similar mitigation measures
- SCAR second workshop proposes risk assessment approach

SCIENTIFIC EXPECTATIONS

- Since there is no proof that there is any impact in Antarctica other than some avoidance behaviour reasonable research should be allowed
- That the sea is a naturally noisy place and science adds only a small amount to the background
- That the mitigation measures and risk analyses need to be given a proper test
- That regulatory agencies should fund necessary research directly if they need more data to be clear about the risks involved

POLITICAL REALITIES

- Precautionary principle can, under some circumstances, be a convenient fig leaf for regulators
- Division of national responsibilities may make it impossible to weigh possible impacts against potential gains
- Protection of iconic species may be important politically despite scientific evidence

CONCLUSIONS

Environmental management decisions should be based on a risk assessment of relevant data

- •The precautionary principle needs to be used carefully as a justification for refusing activities
 - •Science has an important say but decisions are essentially political
- •Ethical concerns should be taken into account
- •Better linkage needed with conservation and environmental management in the rest of the world
- •Standardisation of national treatments seems unlikely to be possible given different systems of governance

More research is certainly needed